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Combat Crew

Strategic Air Command December 1983

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PEACE
IS OUR
PROFESSION

CCTS — *Only for the Best*

How would you like to have a hand — a very important hand — in producing the Strategic Air Command combat crew force? How'd you like to be a role model for the people who will crew SAC's bombers and tankers in the future? How'd you like a job with good visibility, lots of challenge and the prospect of an excellent follow-on assignment? If you haven't thought of it before, maybe it's time you considered instructor duty at the Combat Crew Training School at Castle Air Force Base, California.

To meet the challenges of the 80s and beyond, the Strategic Air Command must retain a highly qualified, dedicated crew force. Command leadership is deeply committed to the maintenance of a superior Combat Crew Training School as the key to assuring the quality of the crew force. This commitment is critical as the CCTS is responsible for the training of sufficient combat crew members to replace fully **one-third** of the SAC crew force each year. CCTS instructors are directly charged with the task of producing qualified men and women to meet the tremendous turnover rate.

It's no exaggeration to say that the instructors produce the combat crew force. They are indeed the role models for their students. Very frequently, students mirror their instructors' level of professionalism and competence. If instructors are highly qualified and highly motivated, the crew force is likely to be highly qualified and highly motivated. Unfortunately, the converse is also true.

Poor instruction produces poor combat crew members. SAC cannot afford less than the best at the CCTS. A mistake during flying training can result in the immediate destruction of an aircraft and significant loss of life. The cost in dollars and human lives is astronomical.

The dangers inherent in poor training at a CCTS multiply and live well beyond graduation day. The impact of poorly trained crew members is like a time bomb waiting to explode.

These reasons are the basis for the command's strong commitment to maintaining superior CCTS organizations. The command must have expert, highly motivated, and highly talented instructors to fill the challenging jobs at Castle. The challenges and opportunities for career development offered by instructor duty at Castle are unparalleled.

There are several reasons CCTS duty provides such challenges. The instructor meets the students on their first day, fresh from academic training, then spends hours, days, weeks working with them, enhancing their development. Finally, the instructor sees them become fully qualified. Thus, the CCTS instructor actually sees his/her efforts bear fruit. A catalyst, he or she trains other men and women to fly their aircraft and safely complete their mission. Seeing the students progress to full qualification is their greatest reward. Guiding their progress is their biggest challenge.

Each of us is an individual and sometimes must be treated on an individual basis. One instructional technique may work for 90 percent of the people but not for the other 10 percent. The CCTS instructor certainly must know the techniques required to train the 90 percent, but he or she must also be flexible enough to find the solution for training the other 10 percent. The solution may be in instructor guides or found by discussing the problems with other instructors and staff members. This process leads to more effective knowledge of interpersonal relations, greater flexibility and potential as a manager and leader, as well as an instructor. This broadening is another reward and can come

FLARE

Lt General James E. Light, Jr.
Commander, 15th Air Force

from experience in other areas as well.

Many CCTS instructors broaden their scope of knowledge through an aggressive ADSAC program. Then there are a wide variety of follow-on jobs to fill at Castle. The list includes: Academic Instructor duty, wing-level jobs in training devices instruction, training program development for a new generation of simulators in the B-52 and KC-135, Standardization Evaluation Division Instructor duty, Central Flight Instructor Course duty, SAC Instrument Flight Course Instructor duty, CCTS curriculum development and management, aircrew scheduling for the biggest flying organization in SAC and all the traditional staff positions available at a SAC bomb wing.

The typical instructor will serve in two or more of these positions during a tour at Castle. That represents a lot of opportunity in one PCS move, and a tremendous means to maximize career development while saving moving expense.

This broadening makes CCTS instructors highly qualified and highly competitive for quality follow-on assignments. **More than 75 percent of the initial instructor cadre for the B-1B Combat Crew Training School will come from the B-52 instructor force.** The people most qualified to fill those positions are at Castle right now.

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Combat Crew

GEN BENNIE L. DAVIS
COMMANDER IN CHIEF, SAC

BRIG GEN JACK K. FARRIS
INSPECTOR GENERAL

COL CHARLES J. WINGERT
DIRECTOR OF SAFETY

STAFF

EDITOR
MAJ. RANDY LAUTERBACH

ASSOCIATE EDITOR
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ART EDITOR
A1C DANIEL BRAINERD

EDITORIAL ASSISTANT
M. J. ABBOUD

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On Our Cover

Season's Greetings to you from the staff of Combat Crew.

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TALL RETIR

Capt Timothy B. Moore
Carswell AFB, Texas

Pilot: "Control! Aircraft 083 is in the green."

Control: "Roger."

Copilot: "Carswell tower, Ruby 3 is number one waiting release."

Tower: "Ruby 3, hold short waiting radar release."

Copilot: "Roger." (The copilot turns and looks out his window.)

Staring out the window, the copilot suddenly realizes that the **end of an era** — that of the B-52D "Tall Tails" — is close at hand. **These proud planes are being retired after over a quarter century of outstanding history.** As the oldest members of the B-52 family, they have served gallantly both as a player in nuclear deterrence and more demonstratively as the backbone of the United States post WWII conventional warfare.

At retirement, the D model was stationed at only two bases; Andersen AFB, Guam and Carswell AFB, Texas and differs from her younger kin, the G and H model, in three obvious ways. First, her distinguishing tail rudder towers over those of the G and H. Second, because of her conventional commitment, the Vietnam color scheme, black belly and camouflaged top, has become a permanent feature and trademark. Finally, the Tall Tail is the last USAF bomber with a tail gunner, an idea whose origin goes back to WWII.

Some of these ancient birds will be flown to the "Bone Yard" at Davis Monthan AFB where most retired USAF aircraft are laid to rest. The remaining are being delivered to many different parts of the country, even England, for permanent static displays as museum pieces. This story focuses on the history of one in particular, Tall Tail 55-083.

With her beginnings at the Wichita Boeing plant and her final stop at the Air Force Academy, 083 became an official USAF bomber on January 8, 1957, and was assigned to Larson AFB, located in Washington State. She served only three days at Larson and then was flown trans-continental to her second home, Loring AFB. With only six months service, 083 went back to Wichita for the first of the continual modifications and modernizations of weapons systems, of which the digital bombing system is the latest. From Wichita, 083 was stationed at Bergstrom AFB for four years and in September 1963, found her way back to Larson. At this time, she had only 3,500 hours. In 1968, she made her first overseas tour, finding herself in the Micronesia Islands on the Island of Guam. It was here she was given the name "Diamond Lil" and received her first taste of the Vietnam conflict. "Diamond Lil" served gallantly, flying missions both out of Andersen AFB

TAIL
EMENT

and Kadena AB, logging over 2500 hours of combat support missions in a little under two years. This performance earned her a two year rest back in the U.S.

"Diamond Lil" once again returned to the Southeast Asian conflict and again proved her capabilities by maintaining a highly successful mission accomplishment rate. She came back stateside for another well deserved break. "Diamond Lil" spent this time preparing for the hardest offensive of the Vietnam conflict and was reassigned to Andersen for participation in Linebacker II, the most extensive bombing campaign of the war.

During Linebacker II, 083 flew a total of eight missions from U Tapao from 18 through 24 and 26 through 28 December. 083 earned honors as one of two B-52s credited with a confirmed Mig kill. On Christmas Eve, Diamond Lil (call sign Ruby 3) made history. In the words of Brig Gen James R. McCarthy and Lt Col George B. Allison, from their book, *Linebacker II; a View From The Rock:* ". . . Migs ineffectively engaged Black and Ruby cells. Once again, it proved costly to the defenders. Another Mig went down from a .50 caliber firing by A1C Albert Moore, tail gunner of Ruby 3."

Most of 083's post Vietnam war time was spent in the U.S. with a few tours at Andersen and when it became apparent that the D model would be around for many more years, at least into the early eighties, it was decided that all D models would have their aged wings reinforced for continued service. In February 1975, 083 was returned to Boeing for the wing modification with over 12,000 hours. With new wings she arrived back at Dyess and deployed to Guam for her final overseas tour where she remained until August 1980 when she returned to Dyess. Her last active assignment was to the 20th Bomb Squadron, Carswell AFB in October 1982.

Now, almost 28 years and 15,000 hours after she rolled out of the Wichita Boeing plant, Diamond Lil, aircraft 55-083, waits at the hold line for her final flight to the Air Force Academy where she will take her seat among the other fine aircraft of Air Force history. She will remind the future Air Force leaders of her rich past and how the "Tall Tail" helped keep the peace of the free world for over a quarter century.

(Suddenly the copilot's thoughts are interrupted)

Carswell Tower: "Ruby 3, wind 160 at 10, change to departure control . . . cleared for takeoff."

Ruby 3: "Roger . . . cleared for takeoff."

Editor's Note: Diamond Lil flew her last flight on October 6, 1983.

THE CUTTING EDGE

Qualities of an MCCC

Capt Woodrow T. Hawley
USAF Academy

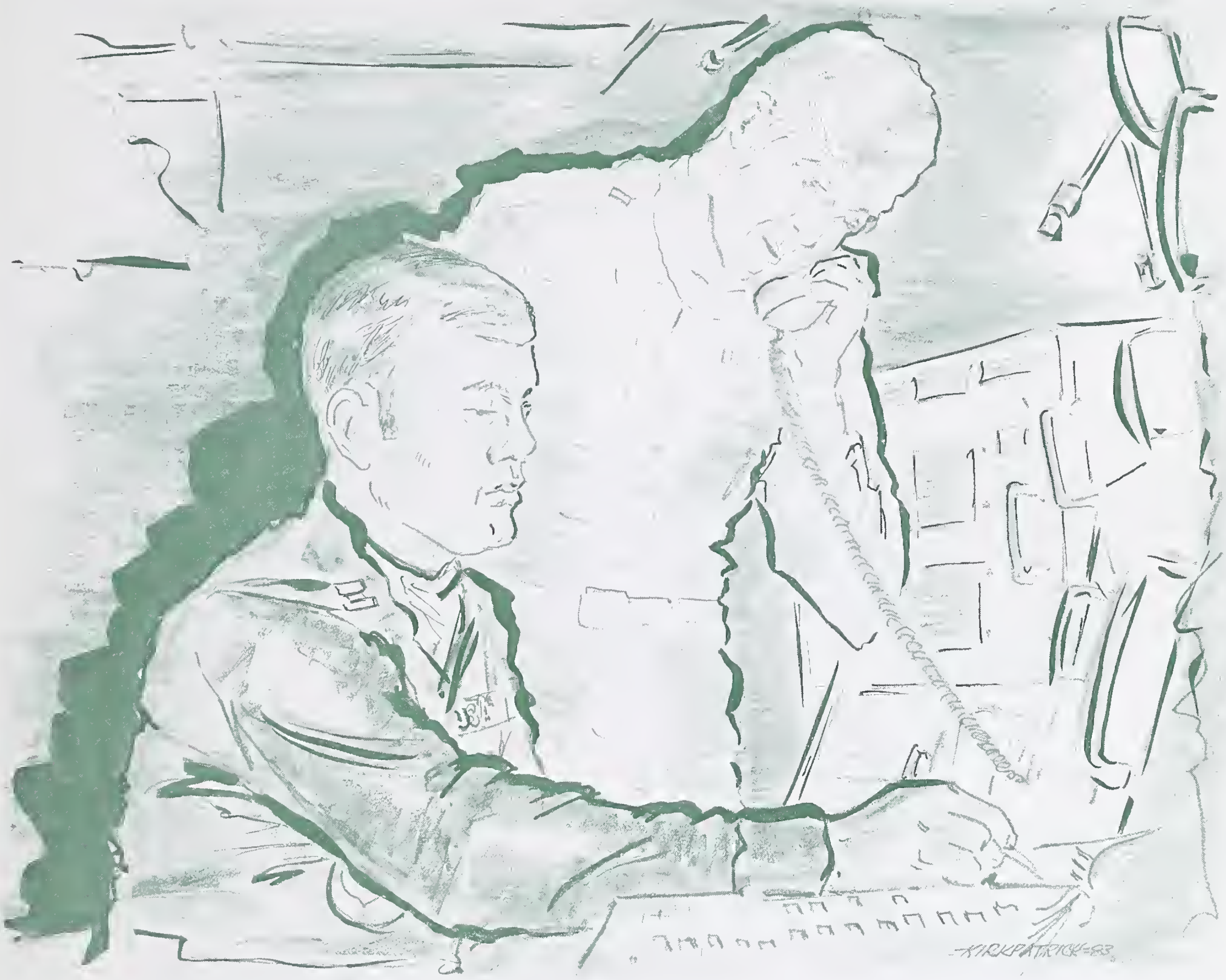
In the oath of office, you swore to **"support and defend the Constitution of the United States against all enemies, foreign and domestic."** This sums up why we are officers and missile combat crew members. Our primary purpose is to "support and defend" national policies and objectives. ICBMs provide the national command authority the strength and flexibility to accomplish national goals and objectives. But the weapon systems are no better than the crews in the launch control centers and the crew is no better than the missile combat crew commander (MCCC) wants it to be. Before upgrading to MCCC, I examined what I needed to do to be a good MCCC. Much of what I learned was beneficial. However, I had to learn by trial and error as well. Above all, I learned one very important fact. To be a good commander takes hard work and dedication. Let's take a few moments to review some of the qualities found in a good missile combat crew commander.

The most important quality is officership. In your position as a MCCC you are, first and foremost, an officer in the United States Air Force. All officers have two things in common; a commission granted by the President and an oath of office. Both of these shed light on your responsibilities and importance to the people of the free world. By accepting a commission, you gained a unique position of "special trust and confidence" from the President of the United States. When you were granted "special trust and confidence" in your abilities, additionally, you were charged to "carefully and diligently discharge the duties of the office to which you are appointed."

The quality of selfless service should be reflected in your day to day conduct and performance. As an officer, you are devoted primarily to serving your country, not personal achievement. You must promote "trust and confidence" in yourself, your crew partners, and your senior commanders. Professional military conduct projects an image of a strong national defense which is the cornerstone of deterrence. People throughout the Free World depend on you. Don't let them down.

Integrity, loyalty, dependability, self-discipline and dedication are all qualities to develop as a MCCC. We often confuse these terms. However, you must have the type of character which merits "trust and confidence." In your day to day operations, your word must be unquestionable. When you say you will do something, it must be done. Your integrity must be indisputable. There can be no doubt as to your motives and purpose. Moreover, your loyalty must be unwavering. As the men and women who have served before you, there must be compelling allegiance to this country's causes and ideals. As world events dictate, the national decision makers must be able to depend on you. The self-discipline you practice daily may be the "cutting edge" between war and peace. Your dedication must be total. All crew members must be devoted to maintaining peace and deterring aggression. This task is not easy. However, the reward is great, knowing you're a vital part in preserving peace and freedom.

The MCCC must be an expert in all aspects of the mission, from weapon system operation to Emergency War Order (EWO) procedures. They must always strive to achieve the highest standards of excellence. The commander is the motivating force behind crew proficiency and achieving excellence. Excellence requires a continuing commitment to study and master the specialized knowledge and technical skills of missile operations. Mastering the weapon system is a continuous process of study and dedication. It started the day you began missile training at Vandenberg AFB and continues



throughout your crew tour. You must merge weapon system and EWO with your crew's procedures. You must learn to understand the "why" of each checklist step. The checklist must become more than words and ambiguous terms. You cannot master the procedures by waiting for others to spoon feed you the information. It takes initiative and self-discipline to learn as much as possible and achieve the excellence which is a trademark of the Strategic Air Command. The 4315th Combat Crew Training Squadron and each operational wing do an outstanding job of providing initial and recurring training. However, the MCCC also has the responsibility to train the crew members. Training develops communications in the crew. All crew members get to know each other and better understand how the other will react in various situations. It allows the crew to know what is to be done, why it should be done and how well it should be done. Crew members begin thinking together and develop the necessary teamwork required to operate efficiently as a crew. Working together to accomplish the mission, they develop pride in the crew and their performance.

As the MCCC, you set the example. You are serving a leadership role and influencing your crew's professional behavior. As your job title denotes, you are the commander. By the authority vested in you as MCCC, you are ultimately responsible for the accomplishment of the mission. You establish the basic expectations of your crew. What you expect of yourself, you should also expect of your crew. Finally, you are developing a reputation which will stick with you and your fellow crew members throughout your military careers.

As you can see, a missile combat crew commander's job is not easy. Many qualities are required in a good commander. As an officer and a crew commander, you manage both people and weapons. Therefore, you must be knowledgeable and skilled, not only in the technical side of missile duty, but also in the management of people. Our national defense depends on you.

Do you have what it takes?

EMDAS . . .

What is it?

Capt Timothy R. Zeigler
EMDAS QOT&E Test Manager
321 SMW, Grand Forks AFB

Expanded Minuteman Data Analysis System (EMDAS) is a system that every Minuteman ICBM operator and maintainer will encounter. What is it? Why is it? What can it do and not do? What does it mean to me? These questions are all typical when any new system comes on line. **What is it** is the easiest to answer.

Simply put, EMDAS is a detailed, computerized missile maintenance management information system. It greatly expands the variety and amount of data available to the maintenance manager. Increased quantities of data alone, however, do not prevent or solve problems. EMDAS is fully capable of analyzing and restructuring the data to provide information for problem solving and decision making. It can identify failure rates and trends, provide status on everything from the radio in a specific maintenance vehicle to the missile wing's EWO capability and much much more.

EMDAS is an embedded weapon system computer, but is located at the missile support base. It is linked to the on-board computer of each Minuteman missile by an existing hardwire connection. This hardwire data link runs through the parent launch control center to the sqaudron command post and then via telephone line to the central EMDAS computer facility on base. Information flow over this data link is only one way — from the missile's on board computer to the EMDAS computer. This data link and the data entry and receive terminals located throughout the entire maintenance complex, plus those in base civil engineering scheduling, the transportation control center and the communication squadron are the source of the increased amounts of data. Almost every instruction transmitted to the missile's on-board computer and its response plus every change in the launch facility's operational status and every fault indication reported by the on-board computer is transmitted to EMDAS over the data link. The status of every maintenance resource is available through the data terminals. With this wealth of information readily at hand, many new doors begin to open.

The software programs that bring the central computer to life and utilize the available information are divided into two main subsystems, the Maintenance Management Program (MMP) and the Fault Isolation Program (FIP). The MMP is the largest software subsystem and the "housekeeper" for the entire EMDAS. All data received by EMDAS, whether from a terminal or the data link, is initially processed by this subsystem. Data received from the data link is transferred to the FIP for fault isolation. The MMP's greatest role is in the management arena, but since many work requirements are generated by faults reported over the data link and isolated by the FIP, I'll summarize the FIP first and get back to the MMP.

The FIP is basically a computerized version of the unit's organizational maintenance control technical data, often referred to as the job control T.O. The FIP is best explained by an example. Assume a missile crew commands a missile's on-board computer to test the

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The Designated Representative

TSgt Larry Strong
CFIC, Castle AFB

In professional baseball, the American League has adopted the designated hitter rule. This rule allows the manager to designate a certain individual to step into the lineup where a weakness in hitting is present. This form of management has been a determining factor in the outcome of many games. Although not a proven fact, I think this idea was taken from a number of SAC regulations and adjusted to meet the needs of baseball. The reason I feel this way is that the aircraft commander (manager) has at his disposal a number of designated hitters, more commonly named the "Designated Representative." The difference is the designated representative does not fill in for a weak area, but is a definite integral part of the crew.

Aircraft commanders, your "designated representative" for weight, balance and cargo restraint is the boom operator. During a class at CFIC on Pilot Cargo Loading, I overheard an IP candidate discussing a situation with another IP candidate. The conversation went something like this: "I asked the boom if he was ready for engine start several times and didn't get a response. I got out of the seat to see why he was not on interphone. Possibly, he was accomplishing some minor checklist item. Well, when I opened the cockpit door I was shocked. There was my boom operator in a heap of straps, tie down chains, with 40 passengers and numerous pieces of cargo placed about the aircraft. I immediately closed the door, went back to my seat, strapped in and advised the command post it would be awhile before we could start engines. I began to wonder what we could have done to be better prepared for this situation." Probably a little exaggerated but not far from the truth. Having a designated representative does not relinquish the responsibilities of the aircraft commanders. This article will address those responsibilities and discuss how an aircraft commander can support the boom operator on cargo/passenger missions.

Knowing where certain responsibilities lie can alleviate many questions on mission planning. SAC mission support cargo, being shipped in direct support of a SAC activity or operation, is the only type of cargo authorized for movement on SAC aircraft without specific approval of HQ SAC/LGT. The Traffic Management Office (TMC) is designated as the agency responsible for Air Clearance Authority (ACA). TMO will determine eligibility of cargo for shipment by SAC aircraft in keeping within the guidelines set forth in SACR 76-1. TMO will be responsible for the processing, manifesting and loading/unloading of all cargo moved by military aircraft.

Passenger eligibility, restrictions, travel authority, etc. aboard SAC aircraft are detailed in SACR 76-1. As with cargo, TMO is designated the ACA for passenger travel on military aircraft. The ACA will, while keeping within local agreements, be the clearance authority for eligibility of passengers, other than SAC crewmembers and mission support personnel. They will process all advance reservation requests. Normally base operations will perform all other processing functions including in-processing, manifesting and pre-departure security procedures.

The aircraft commander or his "designated representative" is responsible for insuring that all baggage and cargo are properly loaded. The correct weight, balance and restraints must be in strict compliance with TO 1C-135(K)A-9. A designated crewmember will also brief the passengers on aircraft safety in accordance with AFM 60-9.

The responsibilities of the aircraft commander and other agencies are very clear. It is not expected that the aircraft commander become an authority on cargo and passengers. However, you do have an authority, your designated representative in the person of the boom operator.

The support you can afford your boom operator begins on mission planning day. Planning is the key to a smooth cargo/passenger mission. Normally, crews are notified mission planning day that cargo/passengers will be on board. A copy of SAC Form 84 will be forwarded from scheduling. This form contains pertinent aircraft and fuel load data along with a listing of cargo items (size, weight, etc.) and the number of passengers scheduled. This should have been coordinated through TMO by scheduling. Armed with this information the boom operator should be given enough time to plan the load using the cargo loading trainer (CLT). Using the CLT allows for establishing where and how the load will be placed on the aircraft, insuring that the proper restraint is applied and that required aisleways are maintained. When this is completed the load is transcribed onto the SAC Form 83 which is a diagram of the aircraft floor. With the SAC Form 83 completed the aircraft loading phase can be accomplished very smoothly. The boom operator, as loading supervisor, can brief the load team on getting the aircraft ready for the cargo. If shoring is required it can be laid prior to the cargo arrival. The tie down devices (rings, chains, etc.) can be placed adjacent to the compartment where the cargo is to be loaded. Remember, additional time will be required, so the standard two hour bus should be changed depending on the amount of cargo or number of passengers. The boom operator's checklist, contained in section 4 of TO 1C-135(K)A-9 will be followed for both loading and unloading the aircraft. TMO will provide manifests for all cargo. Each piece will have a shipment label. Any hazardous materials will have a special handling data/certification label in accordance with AFR 71-4. Cargo items will normally be loaded from a high lift truck. Safety observers will be positioned in the aircraft and on the ground. The observer on the ground will use hand signals as described in the Dash 9 and will be standing by with wheel checks.

BOOM
SAC
YOU'RE UP BOOM!!..
LET'S GET A HIT!!
ROGER...
MANAGER!
U.S. AIR FORCE
USAF

Once the cargo is secured on board the aircraft the boom operator should be ready to brief the passengers. The passenger briefing has been extracted from AFRs 60-1, 60-9, 60-16, SACR 55-51 and the Dash 1. The passenger briefing is the responsibility of the aircraft commander but delegated to the boom operator. Be sure he has the time and a quiet place to give his briefing. Remember the first member of the crew the passengers come in contact with is usually the boom operator. If he is pressed for time the briefing may not be as professional as either you or the boom operator would like it to be. The ACA will provide the passenger manifests and loading cards for each passenger. A count of the passengers against the manifest should be accomplished prior to or during passenger boarding.

This information should peak your interest and promote further understanding of your responsibilities as aircraft commander with regard to your "designated representative." As stated earlier, the object of this article was not to make you an authority on the many aspects of cargo loading but for you to understand the needs of your designated representative and be as helpful as possible. With this understanding you won't be the one calling the command post telling them you may be a little late for engine start.

The Real Pilot

Goes home.

This is the last article in a series, "The Real Pilot" published by our friends to the north in *Flight Comment* magazine. Capt Steve Gallimore, CAF, is the author.

You're probably asking yourself "After all the fun in the mess is over, what does the real pilot do then"? The first thing to remember is that you cannot plan enjoyment. When the real pilots depart the mess Friday night their actions are spontaneous, decisions "off the cuff", and energy unlimited. A common problem faced by real pilots late Friday night is injuries incurred during the evenings activities, such as; dart wounds, facial burns from flaming drinks, cut mouths from eating glasses, frostbite from CO2 exposure, cut chins from landing demonstrations and, of course, any number of injuries from crud games. If *you* want to make it as a real pilot you must remember that mess injuries cannot be given medical aid until the bar closes. (Of course this does not include LOC, but only because you cannot make the decision) (LOC — loss of consciousness).

It follows that the real pilot must be aware of how to handle hospital staff when their Friday night late movie is disrupted. First rule is to enter the hospital enmass either singing songs or racing toward the nurse's station absconding wheelchairs or stretchers — this gets the staff in the right frame of mind. The real pilot will use lines, such as; "call the doc at his downtown office", "a grunt would get a medal for this injury", or "have you had your break today". Now you have them eating out of your hand. Once the injured pilot(s) have been repaired, they leave the hospital singing "North Atlantic Squadron" or other suitable ditty — the real pilot's way of thanking the staff, and secondly entertaining those bedridden patients.

While you proceed to the parking lot the real pilot will vault fences, swing from tree limbs, make wild noises, playfully punch fellow real pilots, walk over cars and all the while not spill a drop of his drink he left the mess with and hid from the hospital staff. It is a good idea for the real pilot to make every possible attempt to acquire accommodation close to other real pilots; ergo, you will have someone intelligent to talk to anytime, if you run out of booze it's available locally, and on Friday you can all *race* your wheels on the same road and continue the party close to home.

After arrival at the designated party-house the standard menu is "egg-in-the-hole" with loads of tabasco, and remember, after completion of the first drink and first round of food a head count must be taken to ensure all real pilots "ran the gauntlet" successfully. If one or more pilots are missing, actions must be discussed objectively over another drink. At this point do not react too quickly. Think of the problem, appreciating that the missing pilot may be a cross-trained navigator, ex-army or ex-navy pilot all of which have difficulty finding any place or driving anything.

After 0300 hrs the real pilot must exercise his own infallible judgement as to when he must depart the fix, homebound. It is recommended that you depart ASAP if you have an early morning mission — of course, the difficulty of the mission will enter into the equation.

Well, its been one hell of a night. Remember, same thing next Friday whether you like it or not!

27
MIR
BAXTER

SAC's
Conventional Role

1Lt Michael T. Hutto
23 Bomb Sq, Minot AFB

Only once in history has strategic aviation been called upon to deliver nuclear weapons in a time of war. The atomic bombs dropped on Hiroshima and Nagasaki were instrumental in ending World War II in the Pacific; an event that made the invasion of Japan unnecessary and saved an estimated one million lives. The destruction of these two Japanese cities also served as a beacon to the world announcing the advent of the nuclear age. The United States suddenly had the prodigious responsibility to manage this awesome power and hopefully use it to serve the purpose of peace throughout the world.

In 1946, the newly formed Strategic Air Command became an instrument to achieve the objectives of national and world security using the ominous threat of nuclear destruction. The next 35 years would result in countless billions being spent on research and development, men and material and as many man-hours devoted to the formulation of a master plan of national defense. The peace our nation enjoys today is perhaps the best commentary on the success of the concept of nuclear deterrence.

While SAC continues to maintain an intercontinental nuclear commitment it has never been called upon to use any type of nuclear device on any enemy. SAC aircrews have, however, met the challenge of battle numerous times by releasing hundreds of tons of conventional munitions on the enemies of democracy and world peace.

Early KB-29 refuels a B-50 receiver.

B-36

Early on the morning of June 25, 1950, elements of the North Korean Army rushed across the 38th parallel, engaging the forces of South Korea and threatening the peace which had existed since the war with the Japanese. At the request of the South Korean government, President Truman immediately ordered complete support from the United States Army and Navy to aid in stopping the advance of the North Koreans. Soon the Air Force and the Strategic Air Command would also play an important role in helping the South Koreans.

B-29 Superfortresses of the 22d and 92d Bomb Groups were called to deploy during the first weeks of July to join the 19th Bomb Group and form the Far East Air Force Bomber Command (provisional) under the command of Maj Gen Emmett "Rosie" O'Donnell, Jr. The command, manned mostly by SAC personnel, began operations against the North Koreans on July 13 with the bombing of the rail center at Wosan. Bomber missions continued through the month of July with sorties devoted to the support of the Eighth Army under the command of Gen MacArthur and attacks neutralizing the munition plants at Hungnam.

By August, the 98th and 307th Bomb Groups had also entered the theater and were participating in the bombing of strategic targets in North Korea. Before the end of the conflict a total of 99 Superfortresses had flown 21,000 sorties and dropped 167,000 tons of bombs. The 37 months of the Korean campaign provided the Air Force with information on radar navigation and bombing, electronic countermeasures and maintenance support — all valuable training that would aid SAC in fulfilling the nuclear commitment that would be necessary during the decade of the fifties.

In 1958, a barrage of heavy artillery fire from the mainland of communist China bombarded the Taiwanese islands of Quemoy and Matsu. The unprovoked attack resulted in quick support from the United States. In addition to strengthening ground alert forces at Andersen AFB, Guam, SAC responded by directing several bomb wings to prepare for contingency operations in the Pacific.

While no such operations ever took place, it was evident that conflicts could arise at anytime, on almost any part of the globe, requiring strategic conventional support from the Air Force and SAC. The decade of the sixties would bring to reality the threats foreseen during this time.

When the first B-52A (ser. no. 2001) rolled out of the Seattle Boeing plant on 18 March 1954, few who watched could begin to imagine the numerous modi-

B-17 "Flying Fortresses"

B-25

fications this versatile aircraft would see. Nor could they see the various roles this now venerable bomber would be called upon to play in the interest of world peace.

From the beginning, the B-52 was SAC's answer to the question of viable intercontinental delivery of nuclear weapons. The BUFF (Big Ugly Fat Fellow) became an important part of nuclear deterrency, capable of being launched under "positive control" and could be recalled by the President and Headquarters SAC if necessary. This was and is the primary role of the B-52, but the advent of the Vietnam conflict would offer the Stratofortress and SAC an entirely different mission.

By the time B-52s began bombing targets in South East Asia (SEA), SAC had already entered the conflict along with elements of the Tactical Air Command. KC-135s had been providing air refueling support for fighter operations since June of 1964. Within one year these tankers would be providing the same support for B-52s flying conventional bombing missions half a world away from the U.S. in the country of Vietnam.

BUFF operations in SEA continued almost daily for over eight years from June 1965 to August 15, 1973. Arc Light became the code name for the first bomber missions flown by B-52F models of the 7th, 320th and 454th Bomb Wings. These aircrafts flew over 100 sorties from June 1965 to December 1965, carrying conventional 750 and 1000 pound munitions in saturation bombing of Viet Cong bases.

The B-52F models were capable of holding 51 bombs (27 internal and 24 on external wing pylons) at 750 pounds each, a limited load which led to the "Big Belly" modifications of the B-52D models. The program would enable the B-52D to increase its bomb load to a total of 108 weapons, a load in excess of 30 tons. B-52F models were slowly phased out of the conflict and replaced by the D models with the new modification. In 1966 over 5000 sorties were flown, dropping approximately 8000 tons of munitions each month. As the war continued B-52G models joined the bombing missions in SEA.

The most famous eleven days in the history of SAC conventional bombing occurred during the Linebacker II operation which involved B-52 saturation bombing of targets in North Vietnam. Between December 18 and December 29, 1972, B-52D and G models operating out of Andersen AFB and U Tapao Air Field dropped over 15,000 tons of bombs on 24 target complexes. This unprecedented air operation was authorized by President Nixon in response to the stagnated Paris Peace Talks. A total of 729 sorties were flown, with a loss of 15 B-52s. The action also saw two confirmed kills by B-52 tail gunners.

The Linebacker II campaign was seen by many as directly leading to the end of U.S. involvement in the Vietnam conflict. B-52s, some over 17 years old, flew 126,615 combat sorties in Southeast Asia all of which delivered some form of non nuclear weapon on the enemy. It is easy to see that SAC is a command that

has seen and lived through years of actual combat experience. It is ironic that all of this combat knowledge involved a secondary mission of the Strategic Air Command.

Moving into the seventies and eighties, SAC took the lessons of Vietnam and formulated a new conventional role for the B-52. New and improved surface to air defenses have forced delivery tactics to change from high level bomber to low level penetrator. Conventional 500 and 750 pound bombs are now designed with deployable high drag fins which allow the bombers safe escape time from blast effects. These new tactics would find use in light of a changing world situation.

The takeover of the American Embassy in Iran, the invasion of Afghanistan, and other international crises illustrated the need for a quick reaction capability by the U.S. military. As a result, the Rapid Deployment Force (RDF) was formed in 1980 to organize the capability to project U.S. forces, quickly, to any part of the world. The U.S. Air Force and SAC took on the challenge of the new RDF with the formulation of the Strategic Projection Force. This new responsibility was tasked to 28th Bomb Wing at Ellsworth AFB, S.D., and the 5th Bomb Wing at Minot AFB, N.D. These wings take on this new conventional role in addition to their normal ground alert commitment.

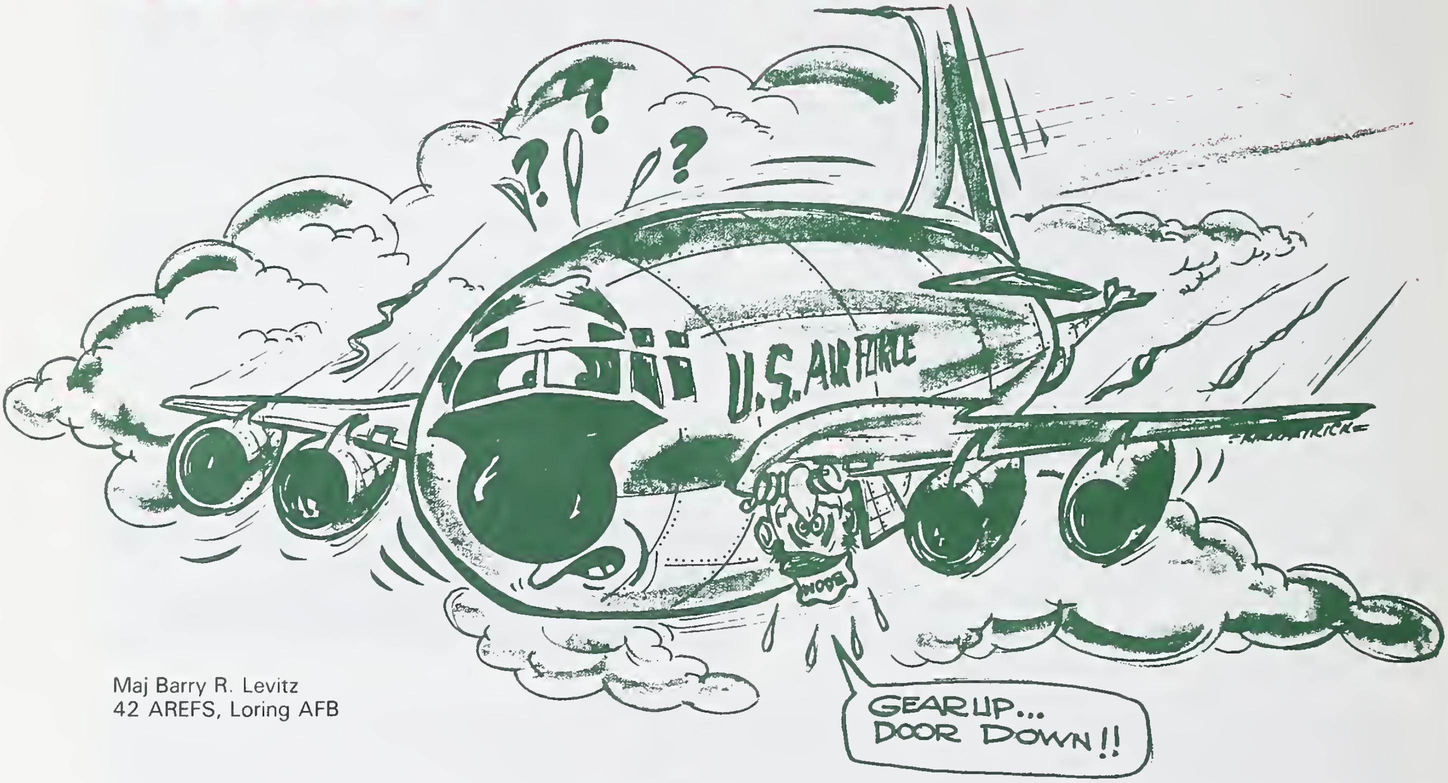
The capability of the Strategic Projection Force was demonstrated in November 1981 when three B-52H bombers participated in Operation Bright Star. During these joint U.S. and Egyptian exercises these bombers flew non stop to Egypt, delivered their payload of conventional weapons and recovered to their home station at Minot. During times of crisis more wings could be called upon to execute this same capability in the interest of national defense.

When the first B-1B (Ser. No. 2001) rolls out of the Rockwell International Plant at Palmdale, California, late in 1984, how many who watch will be able to foretell the roles and modifications this new bomber might have to see? **SAC will continue to plan and is prepared to support a conventional tasking now and in the future.**

B-52

B-52

WHAT NEXT?



Maj Barry R. Levitz
42 AREFS, Loring AFB

Most of us pilots flying today had some type of emergency situation. Many factors influence how well we handle the situation: the nature of the malfunction, mental preparation, systems knowledge and any previous similar emergencies we've had or read about all play key roles in successfully coping. But what happens when we encounter an entirely new scenario — one we haven't heard of or one the Dash-1 doesn't discuss?

Recently my crew and I had one of those **"what next"** situations. Try to second guess me and see if you can solve the problem at an earlier point than I did. Here goes . . .

It was a fine winter day in Aroostook County, 10 inches of snow on the ground, clear skies, calm winds and dry RCR. A perfect day for a copilot takeoff and a beautiful day to fly. We were formation lead for a two ship tanker MITO and *as we watched our two B-52 receivers MITO ahead of us, I had no idea what was in store.* Our clearance for takeoff finally came — power up, count down, release brakes now, 90 knots, S-1, rotate, gear up. So far so good. But now it begins — I move the handle to the up position, then the light in the handle remains on and the left gear indicates an intermediate position. The nose gear and the right main gear both indicate up and locked. I immediately suspected a gear sequence malfunction. I'd seen this before in one of those dreaded CPT sessions. "No problem here," I mused, "a piece of cake. Press on and let's get the flaps up per the takeoff schedule." As skillful and quick witted as I am, I won't let this throw me. We'll just wait a little while until we are further away from the ground. Familiar words are echoing through my mind: *Fly the airplane — analyze the situation — take appropriate action.* The copilot, Capt Steve Delaney, was doing a fine job of flying the airplane, so we continued with the After Takeoff/Climb Checklist and continued our climbout. The boom operator cleared off headset to inspect the rear portion of the aircraft and to check out our situation. I called departure control, but didn't see any need to mention our problem. It would only confuse them and complicate the situation. We followed our clearance and kept our airspeed below 250 knots. I called number two and advised him of our airspeed schedule — couldn't fool him though — a gear door hanging down is not that difficult to see. At this point we were passing through 3000 feet AGL when the boom operator reported what he saw. My suspicions were confirmed. "Left gear up and locked, left gear door full down." SSgt Dale Mitchell is an exceptional boom operator who is very knowledgeable and experienced. His remark was made after careful analysis and visual check of both main gear uplock positions. Both appeared identical. At this point, I pulled out the Dash-1, went directly to Section III and found the checklist for Landing Gear Emergency Operation:

"When gear indicators indicate gear is not up and locked: Make a visual inspection."

Then several paragraphs about the alignment stripes. Because step two dealt only with the nose gear, I jumped to step three:

"If stripes are aligned, gear is locked and position indicator is wrong. If stripes are not aligned recycle gear several times and check stripes again."

That's all it says, folks. The book doesn't cover my exact situation. My suspicions of a sequence malfunction and my flying experience directed me to recycle the gear while the boom operator observed the process. Down came the gear — all indications were normal and the inboard gear door worked. The boom operator reported nothing unusual with the gear down. Now move the gear lever to the up position . . . same condition as before. The boomer didn't see anything out of the ordinary, but he's been watching the gear door and not the landing gear itself.

Time is fast approaching for me to make another decision. I hated to do it, but I told number two we were splitting up the formation and directed him to continue with the receivers. We would try to catch up by the ARCP. We had been airborne about three minutes and were passing through 7000 feet. Without the worry of leading a cell, I now figured we could take some time to solve the problem. Back into the Dash-1 without much more help. My copilot and I decided to try recycling of the gear while slightly jinking the aircraft. We thought that might just guarantee proper sequence actuation. As we passed through 9000 feet AGL we tried this maneuver and **VOILA!** It worked. The left gear now indicated up and locked. I immediately requested clearance to rejoin our cellmate and began my chase to catch him before the refueling began.

Already I started patting myself on the back for a job well done. Just think, I had saved another sortie for the wing and was helping to accomplish two air refuelings, not to mention saving an ICTS. What a hero! Suddenly my reverie was shattered when the boom operator leaned over my shoulder to tell me he thought he saw something hanging from the gear during the last recycling. He couldn't tell if it was a hose, a wire or what. It just caught his eye. I decided to press on with the mission. All the cockpit indications for fuel, hydraulics and electrics appeared normal, but I figured I'd keep a close watch on them all. This little problem wasn't going to stop me. I had gas to pass and a mission to complete.

"As we watched our two B-52 receivers MITO ahead of us, I had no idea what was in store . . ."

The rendezvous, air refueling and navigation leg were all uneventful. We arrived back at the high fix and entered holding so we could check the gear one more time before landing. When I lowered the gear this time the boomer again said he thought he saw something, but he couldn't be certain. We decided to open the gear doors for a better look, so I depressurized the left hydraulic system. Oh No! Something was indeed hanging below the gear. It was the snubber assembly and it was fully extended and hanging three to four feet below the gear strut. My reaction was "what has that snubber done to the various parts within the wheel well, the water tank, the hydraulic lines, electrical wires . . .?" Once again turning to the Dash-1 proved futile. There is nothing there. We contacted the command post to declare an emergency and were told to take a number. They were already handling two other B-52 emergencies. What a day! While we waited, the copilot gained proficiency in performing holding patterns and I mentally wrote our Commendation Medal nomination. Finally, the command post called with the Hotel Conference set up and Boeing on the line. Boeing told us, **"In previous situations on landing, the snubber assembly ripped off and destroyed parts of the undercarriage and fuselage."**

"This has happened before," I thought, "there goes the medal." Anyway, we elected (actually it was Alfa's idea) to make a Thunderbird Fly By in landing configuration, execute a closed pattern, and make a 50° flap full stop. All this went as planned and we stopped on the runway, shut down our engines and were towed to parking. The cylinder didn't tear off, but became twisted between the strut and the number six tire. The result was damage to the strut and wheel well area and a three-and one-half foot tear in the water tank.

We later learned there hadn't been a thing we could have done to prevent the situation. The two shear bolts holding the front part of the snubber assembly either broke or the nuts cracked causing failure during rotation. All the damage had been done on the initial gear retraction. A bend in one of the hydraulic return lines prevented the proper gear sequencing from taking place. Our jinking maneuver caused the assembly to move enough to complete proper sequencing. As I think back on the situation, we had been lucky. First we had accomplished all checklist procedures properly although the Dash-1 didn't have much to fit our situation. Secondly, we hadn't assumed that once we had raised the gear, the problem had been solved. Most importantly we were all well prepared for this type of emergency from our hangar flying sessions, safety meetings and cockpit procedures trainers. If I can leave you with one idea it would be don't ever take this training lightly and always be mentally prepared for anything, especially during the takeoff and landing. These aircraft aren't getting any younger. Another suggestion: why not have all your crewmembers watch a normal gear retraction in flight so they will know what to expect if you should have a similar emergency. Without my boom operator's keen observations, we might not have suspected anything at all. I'll leave you with one final thought: what might have happened if we had been a heavyweight takeoff, at night, in the weather!

THIS IS YULETIDE ONE.... MY REINDEER ARE LOW ON OATS AND DANCER IS ICING UP! HOW ABOUT THAT DESCENT CLEARANCE?
ECHO-9

JOHN J. ROWE

SLAMMING the door against a persistent white swirl that tried to follow, Colonel John Ormsby stood inside the foyer and briskly slapped snow from his uniform topcoat. Satisfied, he finally relinquished it to the hatcheck girl at the counter.

"Well, Millie, you certainly got your wish for tonight," he remarked cheerfully before stepping inside the nearly deserted club.

Glancing around in approval at varied seasonal decorations, Ormsby wished there were more people about. But who ever deliberately spent Christmas Eve anywhere except home? Only soft-hearted commanders filling in for junior officers—that's who, he thought dourly. Nevertheless, a brand new father shouldn't be made to pull duty tonight.

"Colonel Ormsby, you have a call on line five." The blaring PA system neatly caught him mid-stride on a direct course to the bar and he reluctantly veered toward the phone.

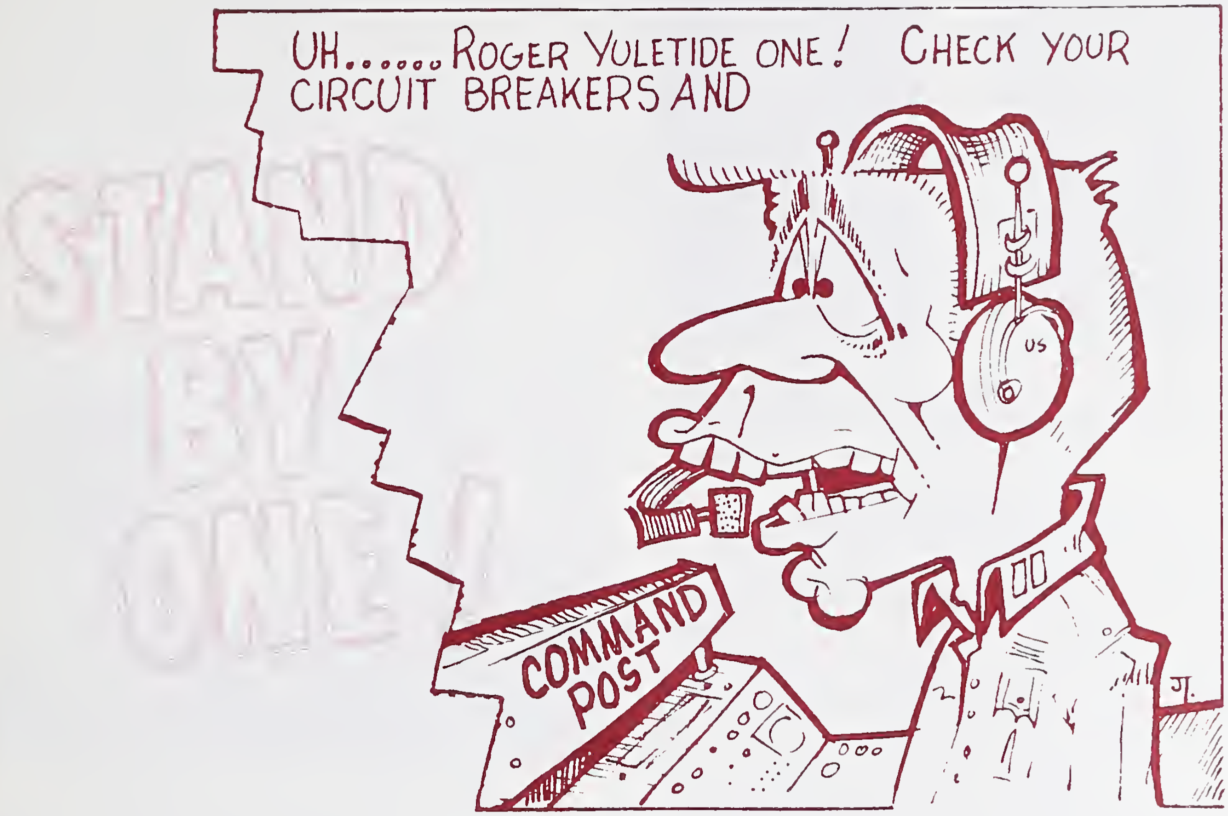
"Ormsby," he bluntly informed the other end.

"Evening, sir, Major Randall, flight supervisor. Hope I didn't . . ."

"No, no, go ahead, Bill."

"Well, sir, I have sort of an emergency in progress."

"On Christmas Eve? Nothing airborne in this stuff is there?"


STAND BY ONE!
UH......ROGER YULETIDE ONE! CHECK YOUR CIRCUIT BREAKERS AND
COMMAND POST
US
JT.

"I don't think so, Colonel, but the tower says it has one holding at the outer marker asking for clearance for an approach."

"Who's on tower tonight?"

"Sergeant Smith."

"And what does approach control have to say about it?"

"Didn't even know he was inbound till they picked him up on their scopes about thirty out." Randall hesitated a moment before going on. "I think perhaps you and Doc Thorpe ought to have a talk with tower, sir."

"Why? What's the matter, Bill?"

"He insists it's Santa Claus requesting an ILS approach to runway two-seven left."

"Ye Gads! Don't move from there. I'll come just as soon as I can get him a replacement and an ambulance—no, I'll run him over to observation myself." He hung up without so much as a goodbye.

Ormsby puffed up the last step. Flanked by Thorpe and a spare traffic controller, he stood in the eerie fluorescence of the tower and listened to the humming radio console while his eyes adjusted. Major Randall hurried to the Colonel's side.

"Evening, sir," he whispered. "There does seem to be an unidentified aircraft at the outer marker."

Quietly they surrounded Sergeant Smith, who leaned over the console in a half crouch, wildly eyeing Ormsby and the flight surgeon.

"Better let me take it from here, Sarge," his relief demanded gently, reaching for the microphone.

"Hey tower! Yuletide one here," came a booming voice over the air. "What's the delay down there?"

"Arr—roger, one—say type aircraft," the replacement queried cagily, looking about him with a suppressed smile.

"Sled and eight,—all perkin'," came the glib reply. "How about a lower altitude? Dancer's icing up a bit."

Shrugging, the tower chief complied. "Yule one is cleared to two thousand. Continue holding and report reaching."

"Check! Outa five, descending. How about expediting a little? Gotta lot of deliveries to make tonight. Remember, you're not the only air base, Charlie."

"Stand by, one."

"What's Santa's weather?" murmured Ormsby automatically.

"Colonel!"

"Dammit, what am I saying anyhow? Let me have that mike." Gripping it tightly with both hands, he keyed it.

"Murphy, if that's you horsing around up there, I'll fry you in oil next time I get to your base," he growled.

"Just left Colonel Murphy's residence, old boy," boomed the voice. "He's trimmin' the tree. I've got a few goodies for your kids too, if you'll just let me down. Too much snow to risk a blind descent."

"Yeah! Well, wise guy, how come Santy needs a letdown? Thought you were supposed to be magic?" snarled Ormsby in cold rage.

"Magic, but not nuts, Colonel. Always been able to tail another ship inbound and slip the scopes till now. But this front caught me flatfooted. Nothing else in the area, so I had to give myself away or be late. By the way, Colonel, I see Cindy's still sucking her thumb. Ah! She looks so cute, asleep and waiting. Better not disappoint her."

Ormsby shoved the microphone back at the tower operator. "Get that screwball down ASAP and have the air police escort the pilot to my office, he ordered curtly. "I'll have his . . . uh . . . well, I'll have it that's all!" He lit his cigar, angrily drawing the match across one of his own "no smoking" signs.

"Yuletide one, cleared for ILS approach to runway two-seven left," intoned the tower. "Carrying 200-foot overcast, 3000 broken, one-half mile in blowing snow. Wind 23 zero at 15, gusting 25. RCR of 10. Altimeter two-niner-ate-fower. Cleared to land."

"Whoops! Nasty little crosswind there. Yule one commencing approach. Be advised I've got Prancer temporarily feathered. No emergency—he's just a trifle pooped."

They didn't even bother to answer, but grimly stared through sleet covered windows at the runway's dim outline, waiting for the first sign of a landing light.

"Got him!" cried the Major. "A little left of center, but moving over!" All eyes swung in line with his finger.

In shocked incredulity, they stared—seeing, but not believing—as eight beautiful reindeer were briefly silhouetted against the threshold lighting. They leveled off just beneath the overcast, then banked sharply right to hurtle directly over the tower and toward the housing area. A loud jingle of bells gradually faded, to be replaced by the humming console.

"Ho! Ho! Ho!—little rusty there. Yule one is in contact and closing out. A Merry Christmas to all, and to all, good night!"

Dazedly they stared at the offending loudspeaker while somewhere in the background a phone commenced ringing frantically.

"It's Mrs. Ormsby, sir, said to remind you to drop by the hospital and ask the MOD for some more of that medicine for Cindy. She's sucking her thumb again."

...AND A GOOD NIGHT TO ALL!
SIR, YOU'RE SUPPOSED TO STOP BY THE HOSPITAL AND PICK UP SOME THUMB SUCKING MEDICINE FOR YOUR LITTLE GIRL.... SIR???
JThompson ECHO-9

PROFESSIONAL PERFORMERS

1Lt James G. Johnson and 1Lt Mark A. Eunson

Missile Crew

1Lts Mark A Eunson and James G. Johnson, 351 SMW, Whiteman AFB, are SAC's Missile Crew of the Month. The crew assumed command of Bravo LCC while the squadron was operating in a degraded condition due to the squadron command post being shut down. Bravo LCC had assumed responsibility for Delta flight and was acting as controlling LCC. Heavy maintenance activity existed in both flight areas. At Bravo LCC, a maintenance team was working in the LCEB on the Normal Environmental Control System. The crew received notification that the brine chiller had developed a critical freon leak at a pressure relief valve. All the freon in the system had escaped into the atmosphere and was rapidly depleting the oxygen supply in the LCEB. The crew immediately evacuated the maintenance team topside and began emergency procedures to manually harden the LCC. Shortly after manual hardening was completed, the FSC at Echo LCF called stating that he was unable to contact his LCC by any means. The crew implemented emergency procedures and established contact with Echo capsule, relaying authentications, thereby allowing the facility manager to be properly processed downstairs preventing a serious breach of security. The professionalism exhibited by Lieutenants Eunson and Johnson during this life threatening situation ensured personal safety and the safe operation of the LCC as well as the squadron.

A1C Rex A. Mitchener

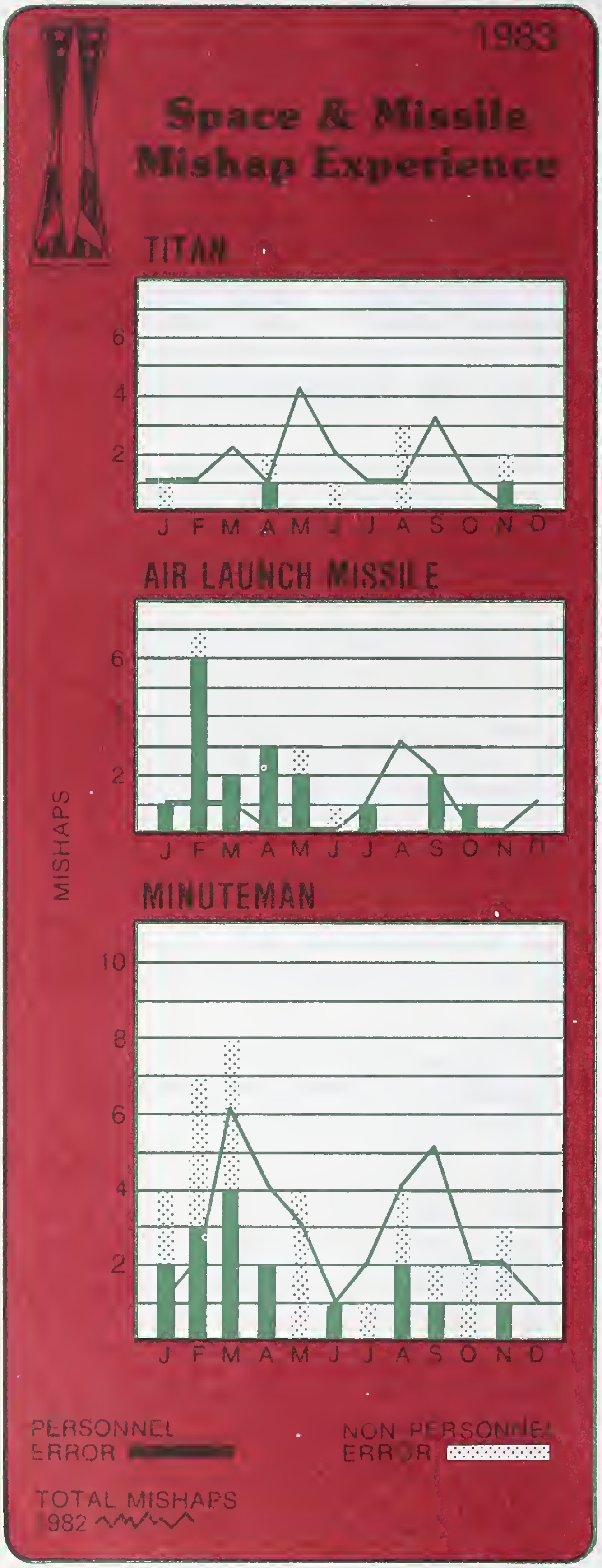
A1C Kevin O'Connor

Missile Maintenance

A1C Rex A. Mitchener, 308 SMW, Little Rock AFB, is SAC ICBM Maintenance Airman of the Month. A1C Mitchener is a first class technician who tackles the tough job inspecting, troubleshooting, calibrating and repairing Titan II launch critical missile electronic equipment with the tenacity it takes to produce outstanding results. When a critical code component malfunction took a sortie off alert, Airman Mitchener worked three consecutive 16-hour days to return the sortie to alert two days earlier than expected. His evaluation record is a furhter demonstration of excellence — error-free performances on his last eight evaluations including two "highly qualified" ratings. In May 1983, SAC's technical evaluation team rated him "highly qualified," a significant contribution to the electronics section's "outstanding" ratings. Airman Mitchener earned one of only two positions on the wing's 1983 SAC Missile Combat Competition electronics team. The team "brought home the gold" — the Best Electronics Team in SAC — earning 297 out of 300 possible points.

Aircraft Maintenance

A1C Kevin O'Connor, 509th BMW, Pease AFB, is SAC's Maintenance Airman of the Month. Assigned to the FB-111A Phase Inspection Team, Airman O'Connor completed all career development course volumes in less than three months while maintaining a superior 95 percent volume review exercise average. He continued to excel as he scored 96 percent on the end of course test, a rare achievement. Airman O'Connor holds one of the most extraordinary MSEP records since the program's event. His followup evaluations as well as all quality control task evaluations have been outstanding; no discrepancies were noted by the evaluators. This is an outstanding feat considering there are over 800 carded inspection items. His MSEP record is a tribute to the ability, pride and dedication he brings to every task.



CCTS-*Only for the Best*

continued from page 3

Former CCTS instructors and staff officers are in demand all over the Air Force. More than **90 percent** of Castle instructors go on to staff positions at air divisions, NAFs, and higher headquarters, or directly into squadron commander/ops officer positions at unit level.

During the 12-month period ending in July 1983, 58 instructors were reassigned following CCTS duty. Nineteen went to higher headquarters assignments. Eight went to AFIT/PME assignments. Eight more received special duty assignments. Five were assigned to overseas locations including Hickam (2), Panama, Alconbury, and Eielson. Four became squadron commander/ops officers directly from Castle. Five were assigned to line rated positions at tactical squadrons. Two were assigned as squadron instructor pilots, (one has become a B-52 squadron operations officer). Seven were assigned as instructor navigator or electronic warfare officers in tactical squadrons. Enlisted instructors receive preferential assignments through their respective functional managers and are highly successful. More than 90 percent have received the bases of their choice after their tour at Castle.

These instructors were not given good assignments. They earned them through hard work and careful application of effort. Their efforts were recognized. The job at Castle is critically important and the senior staff knows it. The instructors who work hard, do a good job, and continue to develop themselves professionally receive outstanding OERs and APRs. Their careers are carefully monitored by the SAC directorate of assignments.

The command must insure that the CCTS can and will continue to produce highly qualified crew members. To do that, we need you. If you want to fly, if you seek a challenge, if you have the talent to instruct, put CCTS duty high on your list of options.

The CCTS is an excellent place to complete flying gate credit. Completing flying gate credit provides greatly increased future career flexibility and the additional experience and rank make you invaluable as a staff officer and a leader.

The time you invest at the CCTS will be challenging, at times frustrating, but, in the end, immensely rewarding. You'll know that you played a major role in giving our country, the Air Force, and the Strategic Air Command the best trained and most knowledgeable combat crews — crews that will carry on the mission of strategic deterrence and insure that our people remain alive and free. ★ ★ ★

SAC'S TEN YEAR FLYING SAFETY RECORD

CLASS A FLIGHT MISHAPS

YEAR	73	74	75	76	77	78	79	80	81	82	83
TOTAL MISHAPS	5	8	4	4	4	1	5	4	4	2	2
FLYING HOURS 100 000	6.1	5.1	4.2	3.9	3.7	3.6	3.6	3.4	3.5	3.5	2.5
FATALITIES	0	14	7	22	10	5	7	2	14	9	7
RATE	.82	1.6	1.0	1.0	1.1	.28	1.4	1.2	1.2	.58	.65*

[illegible]

26909

SEPT FLYING HOURS*

246288

1983 FLYING HOURS

APRIL JUNE	B-52G FB-111A

1983 MISHAP STATS

launch facility's ground systems. Through the data link the FIP "sees" the command directive and monitors for a test complete message. If the FIP receives a fault indication, it "turns the page" to the appropriate fault entry in its computerized tech data and applies the logic necessary to isolate the fault. If conditional responses are necessary to correctly isolate the fault, the FIP searches its data base or asks job control the necessary questions. If additional testing is required to further isolate the fault, the FIP informs job control and they inform the missile crew. Once the fault is isolated, the FIP tells job control what team type, parts, and equipment are necessary to correct the fault. The FIP also assigns a maintenance priority to the fault. All this information is provided to the controller for evaluation. If the controller concurs with the recommendations, he instructs EMDAS to enter the fault in the work requirements file. The MMP is now back in the act.

The MMP does the lion's share of the work in EMDAS. It maintains the work requirements for the entire missile wing, which include all identified discrepancies at the launch and launch control facilities and on maintenance-owned equipment and vehicles. Also included are all periodic calibrations and inspections required on the launch and launch control facilities and equipment and vehicles. The MMP also receives and maintains availability for all maintenance resources.

The long run benefit of EMDAS is a more reliable weapon system and a higher alert rate.

Team, equipment, vehicle and part availability are input, via terminals, by the owning workcenter. At the direction of Maintenance Control, the MMP will allocate these resources to selected work requirements and print daily maintenance technicians. The MMP also provides a method for job control, transportation control and the workcenters to monitor work-in-progress. When the work is complete, extensive information about the actions taken and time to correct the discrepancy is input into EMDAS. The MPP's capabilities go beyond the scheduling and controlling of maintenance tasks.

The MMP is a true management information system. It will develop and maintain several history files, which can be used for detailed analysis; it prepares ICBM monthly status reports, which summarize off-alert and partially mission capable conditions; it generates an unlimited variety of reports for use at the local level; it interfaces with the base supply computer, with the base level computer and with an Ogden Air Logistics Center computer; it maintains a clock with alarm features so that job control can easily monitor time requirements; it advises maintenance control when to schedule recurring calibrations and inspections; and it even provides a communications network for the system users. Why are two powerful systems like FIP and MMP being provided?

EMDAS is provided to enhance and improve the capability to maintain the Minuteman weapon system in an alert status. This will happen in a synergistic manner. Many improvements and aids will result in an increasingly more effective operation. First, the growing work requirements and reduced manning have most managers working extremely long hours. The time saved by computerizing many manual systems will free the managers to focus on real and potential problems and will allow improved preparation for the work being done. The greatly enhanced history files, which will allow improved analysis of faults and past actions, will also certainly help in this area. The history files also hold the potential for significant changes in the way faults are analyzed, isolated and responded to (during the first two days of EMDAS QOT&E four changes to the job control T.O. were identified). Transients, such as cycling security or ECS faults, that are often lost in the current system, will be recorded for all to see and act on. Actions taken to correct discrepancies will also be more accurately maintained, offering the hope of future improved depot and supply support. As data from the ICBM fleet builds, developing trends may point the way to future modifications. While the maintenance arena will change greatly with EMDAS, the operators will be impacted very little.

During the early years following implementation of EMDAS, the impact on the missile combat crews will be very limited. Fault reporting, as currently required by operational tech data will still be necessary. This decision allows time to build confidence in and improve EMDAS's capabilities. No system, new or old, is perfect. Prove this to yourself by checking the number of the current change posted to your tech data. EMDAS is no more capable of replacing the reporting function 100 percent, than it is of replacing the job controllers; it is impossible to program every possible fault. Crews should, however, see improvements in some area. For example, you'll recall that transient faults will be captured and remembered by the MMP. Exact occurrence rates will be provided so that resources can be allocated as priorities allow. The bulk of the benefits from EMDAS will be realized by the maintainers. Operators will see only minor changes in their daily operation. The long run benefit is a more reliable weapon system and a higher alert rate.

The 321st SMW at Grand Forks AFB is the lead wing for EMDAS. The Qualification Operational Test and Evaluation of the system ended in November with the final decision on EMDAS expected shortly. Although EMDAS is not perfect, prospects look good for accepting the system. New procedures and systems tend to polarize the opinions of those involved. This is especially true of computerized systems like EMDAS. Many psychological barriers will need to be overcome. Managers at all levels will need to rethink their procedures, questions and expectations. The potential for improvement is there. Hard work will be necessary to develop that potential.

SAC SAFETY SCREEN

77 BMS, Ellsworth Crew R-31: P Capt Ricky J Cosby, CP Capt Thomas M McEwan, RN Capt Victor M Huber, N 1Lt Thomas S Young, EWO Capt Michael D Wilcox, G A1C Christopher A Oliver

28 AREFS, Ellsworth Crew E-103: P Capt Douglas S Rowley, CP 1Lt Michael T Schilz, N 1Lt Kevin R Lewis, BO SSgt Douglas E Schultz

4 ACCS, Ellsworth Crew R-106P: P Capt Dean S Riding, CP Capt Thomas L Maxwell, N Capt Ronald L Cekovick, BO TSgt William Smith Jr, MCCCA Capt David Hockaday, DMCCCA Capt Willis Clark, Ops Controller Maj Bruce Gilbert, EA SMSgt Harold Sterling, Force Status NCO TSgt Douglas Stacey. Intel Planners: Maj John Humphries, Capt James Rush, Ops Planners: Maj Greg Nielson, Capt Donald Shinabarger, Log Officer Maj Roger Thompson, Log NCO CMSgt Thomas Bilger, Comm Contr Off Capt Tim Martin, TWA Operator TSgt James Nelson. Radio Operators: SSgt Steven Mjelde, SSgt Kenneth Griffin, SSgt William Cadola, SSgt Robert Balok, AFSATCOM Operator SSgt Marion Martin, Data Operator A1C Franklin McCartney

528 BMS, Plattsburgh Crew S-07: AC Capt Donald C Siegel, NB Capt John R Snell

529 BMS, Plattsburgh Crew S-51: AC Maj Joseph B McNichols, NB Capt Kurt J Klingenberger

310 AREFS, Plattsburgh Crew R-182: AC Capt Kevin M Kelly, CP 1Lt Gordon R Burns, NN Capt Michael T Raymond, BO SSgt Marco Delfelice

91 AREFS, McConnell Crew E-103: P Maj Marck R Cobb, CP 1Lt Jeffrey A Kennedy, N 1Lt Brian R Madtes, BO SSgt Richard J Lusk

384 AREFS, McConnell Crew R-155: P Capt Bill F Sullivan, CP 2Lt William R Coggins, N 2Lt Janet C Lewis, BO SrA Randall W Johnson

524 BMS, Wurtsmith Crew S-10: P Capt Alan J Doi, CP Capt Linwood Mason Jr, RN Capt Eric A Reffett, NN 1Lt Keith A Keck, IE 1Lt William H Wilson, IS SSgt Robert E Horton

917 AREFS, Dyess Crew E-110: IP Maj Micheal Wellington, CP 1Lt Wayne Bradsahw, N 1Lt Phillip Neely, BO SSgt Charles Pierce

920 AREFS, Wurtsmith Crew E-155: P Capt Wilfard G A Palms, CP 1Lt Danny A Pegram, N 2Lt Norman L Drabek, BO Sgt Dale D Martin

305 AREFS, Grissom Crew E-134: IP Capt James G Grizzard, CP 1Lt Wayne E Steward, NN 2Lt Peter G Sands, BO SSgt Robert Morgan

70 AREFS, Grissom Crew R-181P: AC Capt Michael J Weisenberger, CP 1Lt Michael B Kinnaman, NN 1Lt Patrick A Stroman, BO/IS MSgt Robert W Hatchett

320 BMW, Mather Crew S-30: P Maj Edwin J Halik Jr, CP 1Lt Brian C Tighe, RN Maj Hugh P Holt, NN 1Lt Keith A Hutcheson, EW 1Lt David W VanWagoner, AG SSgt Terry McKinney

320 BMW, Mather Crew R-106: P Capt Clyde Scott, CP 1Lt Mark Roth, NN 1Lt Michael Cerbin, BO SSgt William Naumer

23 BMS, Minot Crew S-21: IP Maj Dennis E Doucet, CP Capt Edward L Fix, RN Lt Col James B Houston Jr, N Capt Edwin E Valla, EWO Capt Mark E Barnett, AG TSgt Charles C Stehr

308 SMW, Little Rock Crew R-011: MCCC 1Lt Rodney K Robison, DMCCC 2Lt Greg B Anderson, MSAT A1C John J Ayers, MFT A1C Mike W Russell

381 SMW, McConnell Crew E-144: MCCC 1Lt Richard W Davis, DMCCC 2Lt David Aceret, MSAT SrA Kevin Tanges, MFT A1C Jesse A Flores

321 SMW, Grand Forks Crew E-150: MCCC Capt Brian Carlton, DMCCC 2Lt Keith Miller

90 SMW, F E Warren Crew E-011: MCCC 1Lt Edward C Carlson, DMCCC 2Lt Stephen D Hill

341 SMW, Malmstrom Crew S-001: MCCC Capt Dennis A Pierson, DMCCC 2Lt Thomas W Billick

6 SW, Eielson Crew S-03: IP Capt Michael H Rayburne, CP Capt Arpad E. Horvath, N Capt William G French, N Capt Roger I Ross

337 BMS, Dyess Crew E-15: IP Maj Louis Edwards, CP 1Lt Rodcrick Gillis, IRN Capt Donald Thompson, N 1Lt Ronald Pacheco, EW Capt Carl Yakabowskas, G A1C Frank Serra

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Season's Greetings

From

The Staff